AMENDMENTS

Amendments to the Claims

This listing of claims replaces all prior versions and listings of the claims in the application:

1. (Original) A molten metal pump comprising:

a motor;

a drive shaft comprising a motor shaft coupled to a rotor shaft, the rotor shaft having a first end and a second end wherein the first end has an outer surface and a keyway formed in the outer surface, and the second end has flat, shallow threads;

a coupling having a first coupling member for coupling to the motor shaft and a second coupling member for connecting to the rotor shaft, the second coupling member having a projection that is received in the keyway;

a pump base having a pump chamber and a discharge; and

a rotor positioned at least partially in the pump chamber including a connective portion having flat, shallow threads, the second end of the rotor shaft received in the connective portion

2. (Original) The pump according to claim 1 wherein the rotor shaft is comprised of graphite.

3. (Original) The pump according to claim 1 wherein the coupling is comprised of steel.

4. (Original) The pump according to claim 1 wherein the pump is a gas-release pump and includes a gas-release conduit attached to the discharge.

5. (Original) The pump according to claim 1 wherein the pump is a gas-release pump and includes a metal-transfer conduit attached to the discharge and a gas-release conduit attached to the metal-transfer conduit.

6. (Original) A pump according to claim 1 wherein the pump is a transfer pump and includes a metal-transfer conduit attached to the discharge.

7. (Original) The pump according to claim 1 wherein the projection is substantially the same length as the keyway.

8. (Withdrawn) A rotor shaft for use in a molten metal pump, the rotor shaft having an outer surface, a first end for connecting to a coupling and a second end for connecting to a rotor wherein the first end includes a vertically-extending keyway formed on the outer surface, the keyway for receiving a projection whereby the projection can apply driving force to the rotor shaft.

9. (Withdrawn) The rotor shaft of claim 8 that is comprised of graphite.

10. (Withdrawn) The rotor shaft of claim 8 wherein the outer surface is annular.

11. (Withdrawn) The rotor shaft of claim 8 wherein the first end does not include threads.

12. (Withdrawn) The rotor shaft of claim 8 wherein the keyway has a depth of ⅜" and a length of 3" – 4".

13. (Withdrawn) The rotor shaft of claim 8 wherein the keyway is formed at a 45 degree angle relative the longitudinal axis of the rotor shaft.

14. (Withdrawn) The rotor shaft of claim 8 wherein the second end includes flat, shallow threads.

15. (Withdrawn) The rotor shaft of claim 8 that further includes a ceramic sleeve.

16. (Withdrawn) A coupling for use in a molten metal pump, the pump comprising a motor shaft and a rotor shaft, the coupling comprising a first end for connecting to the motor shaft and a second end for connecting to the rotor shaft, the second end including a longitudinally-extending projection to be at least partially received in a keyway of the rotor shaft.

17. (Withdrawn) The coupling of claim 16 wherein the second end of the coupling does not include threads.

18. (Withdrawn) The coupling of claim 16 wherein the second end of the coupling comprises a cylindrical opening having an inner surface, wherein the projection is positioned on the inner surface.

19. (Withdrawn) The coupling of claim 16 that is comprised of steel.

20. (Withdrawn) The coupling of claim 16 that further includes apertures for receiving a bolt.

21. (Withdrawn) A rotor for use in a molten metal pump, the rotor having a connective portion for connecting to an end of a rotor shaft having flat, shallow threads, the connective portion having flat, shallow threads configured to receive the flat, shallow threads of the end of the rotor shaft.

22. (Withdrawn) The rotor of claim 21 that is comprised of graphite.

23. (Withdrawn) The rotor of claim 21 that is trilobal.

24. (Withdrawn) The rotor of claim 21 that is a device including an inlet structure and a displacement structure for displacing molten metal, whereby the inlet structure and displacement structure rotate as the rotor rotates.

25. (Withdrawn) A rotor shaft for use in a molten metal pump, the rotor shaft having a first end for being received in a coupling, the first end having flat, shallow threads.

26. (Withdrawn) The rotor shaft of claim 25 that further comprises a second end having flat, shallow threads, the second end for attaching to a connective portion of a rotor.

27. (Withdrawn) The rotor shaft of claim 25 wherein the second end includes a taper for centering the shaft in the bore.

28. (Withdrawn) A rotor shaft for use in a molten metal pump, the rotor shaft having a first end for being received in a coupling and a second end for connecting to a rotor, the first end including keyway means for receiving driving force from the coupling.

29. (Withdrawn) The rotor shaft of claim 28 wherein the second end includes connection means for connecting the rotor shaft to the rotor.

30. (Withdrawn) The rotor shaft of claim 28 wherein the rotor shaft has an outer surface and the keyway means is a vertical keyway formed in the outer surface of the rotor shaft.

31. (Withdrawn) The rotor shaft of claim 30 wherein the keyway means has a length of about 3".

32. (Withdrawn) The rotor shaft of claim 30 wherein the keyway means is formed parallel to the longitudinal axis of the rotor shaft.

33. (Withdrawn) A rotor shaft for use in a molten metal pump, the rotor shaft having a first end for connecting to a coupling and a second end including thread means for connecting to a connective portion of a rotor and capable of applying at least some drawing force to the rotor.

34. (Withdrawn) The rotor shaft of claim 33 wherein the thread means comprise threads that are not pointed.

35. (Withdrawn) The rotor shaft of claim 33 wherein the thread means comprise threads that are not tapered.

36. (Withdrawn) the rotor shaft of claim 33 wherein the thread means comprise threads that are about .495" wide and .100" deep.

37. (Withdrawn) The rotor shaft of claim 33 wherein the second end is tapered.